



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|----------------------|------------------|
| 09/742,625 | 12/20/2000 | Frank Bor-Her Chen | 25164-67462 | 9358 |
| 28863 | 7590 | 04/10/2006 | EXAMINER | |
| SHUMAKER & SIEFFERT, P. A. 8425 SEASONS PARKWAY SUITE 105 ST. PAUL, MN 55125 | | | CLEVELAND, MICHAEL B | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1762 | |

DATE MAILED: 04/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|-----------------------------|--|
| Office Action Summary | Application No. 09/742,625 | Applicant(s) CHEN ET AL. | |
| | Examiner Michael Cleveland | Art Unit 1762 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2006.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-39, 41-46, 48, 50-54 and 63-66 is/are pending in the application.
 4a) Of the above claim(s) 63-66 is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 37-39, 41-46, 48 and 50-54 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>101105</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/27/2006 has been entered.

Election/Restrictions

2. Applicant has newly submitted claims 63-66 and amended claims 44-46, 48, 53-54 to be directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

This application contains claims directed to the following patentably distinct species: A) cross-linking a composition during application to a compressible mat, followed by deposition of a top coat before heating and compressing, and B) applying the compositions to a press platen and subsequently transferring them to a compressible mat to attach the laminate to the compressible mat.. The species are independent or distinct because they are mutually exclusive.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 44-46, 48, 53-54 are generic.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 63-66 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 53 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase “further comprising applying a top coat composition over the matrix” is unclear because there is no antecedent basis for the term “the matrix” and because it is not clear whether this top coat is in addition to the one recited by parent claim 44. In the previous version of parent claim 44, no top coat was mentioned and the term “matrix” referred to the crosslinkable coating that is now referred to as the primer coating. Based on comparison with the prior claims, claim 53 has been interpreted as reciting that the top coat of parent claim 44 is applied to the primer coating layer.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 37-39, 42, 44-46, 49-50, and 53-54 are rejected under 35 U.S.C. 102(b) as being anticipated by van der Hoeven (U.S. Patent 4,789,604, hereafter ‘604).

Claim 37, 44, 53: ‘604 teaches forming a crosslinkable polymer coating on resin-impregnated kraft paper (i.e., a compressible mat comprising fibers (col. 6, lines 43-45) and particles in a resin binder composition), crosslinking it at room temperature (i.e., without heating) (col. 9, lines 43-62),

applying on the crosslinked polymer matrix a top coat composition comprising a polymer (which must inherently be either thermoplastic or thermosetting) latex composition to form a top coat layer (col. 10, lines 39-48); and

compressing and heating the crosslinked coating between metal surfaces in a press and the mat to form the polymer coated substrate and releasing the coated substrate from the press (col. 10, lines 60-63).

The composition is crosslinked at station 4 at the same time (i.e., when) it is applied at station 11.

Claims 38-39, 45-46: The substrate for the coating may be a wood panel with paper attached to it (col. 6, lines 25-54). (In such embodiment, the polymerizable coating is placed on

Art Unit: 1762

the paper (col. 6, lines 30-32). Adjacent layers may be attached by glue (col. 3, line 50-col. 4, line 5).

Claim 42: There is no indication that ions are present in the radiation-crosslinkable compositions. Therefore, they appear to be covalently cross-linked.

Claim 50, 54: '604 teaches that a top, release coating (3) may be applied to the polymer before compressing and heating (col. 10, lines 48-57).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 37-39, 41-46, 48, and 50-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over van der Hoeven '604 in view of Helmer et al. (WO 96/22338, hereafter '338).

Claims 37, 41, and 43: '604 is discussed above. It teaches the use of crosslinking acrylate polymers (col. 5, lines 1-62) to provide decorative coatings. It does not explicitly teach the use of ionically crosslinked polymers that cross-link at the point of application.

'338 teaches the formation of a quick drying paint (i.e., a decorative coating) comprising crosslinking acrylate polymers (pp. 3, 7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used these polymers in place of those of '604 in order to have achieved faster curing with a reasonable expectation of success because they are decorative crosslinkable acrylate polymers disclosed as having the advantage of hardening quickly. Applicant states that these polymers are ionically crosslinked, thermosetting polymers, and that they crosslink as they are being applied (i.e., concomitant with application).

Claims 38-39: '604 teaches that the substrate for the coating may be a wood panel, or a wood panel with paper attached to it (col. 6, lines 25-54). (In such embodiment, the polymerizable coating is placed on the paper (col. 6, lines 30-32). Adjacent layers may be attached by glue (col. 3, line 50-col. 4, line 5).

Art Unit: 1762

Claim 42: '604 contains no indication that ions are present in the radiation-crosslinkable compositions. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used covalently cross-linking polymers, particularly in view of Applicant's disclosure that fast cross-linking covalent cross-linking polymers are known.

Claim 50 and 54: '604 teaches that a top, release coating (3) may be applied to the polymer before compressing and heating (col. 9, lines 20-62).

Claims 51-52: '338 teaches that the solids content may be 40-70 % (p. 14, lines 29-36).

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 37-39, 41-46, 48, and 50-54 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-38 of U.S. Patent No. 6,165,308. Although the conflicting claims are not identical, they are not patentably distinct from each other because they merely represent different combinations of claimed features.

Response to Arguments

11. Applicant's arguments filed 1/27/2006 have been fully considered but they are not persuasive.

Art Unit: 1762

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

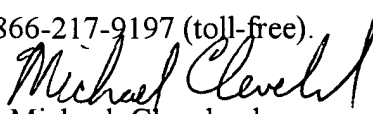
Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Motter et al. (U.S. Patent 5,635,583, col. 2, lines 31-40), Moschovis et al. (U.S. Patent 4,782,129, col. 6, lines 10-25), Traver et al. (U.S. Patent 4,190,688, col. 2, lines 1-9), and Josten et al. (U.S. Patent 4,125,497, col. 2, lines 3-13) are cited as evidence that faster curing resins are recognized in the art of curing resins as advantageous.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Cleveland whose telephone number is (571) 272-1418. The examiner can normally be reached on Monday-Thursday, 7-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Michael Cleveland
Primary Examiner
Art Unit 1762

4/4/2006